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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/751,945 | 12/29/2000 | Jiandong Huang | 256.078US1 | 7950 |

128 7590 06/25/2003

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| EXAMINER |
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JAROENCHONWANIT, BUNJOB

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| ART UNIT | PAPER NUMBER |
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2141

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DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,945

Applicant(s)

HUANG ET AL.

Examiner

Bunjoo Jaroenchonwanit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. This office action is in response to amendment filed 05/29/2003, the amendment has been considered. Claims 1-33 are pending for examination, the rejection cited as stated below.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first link and second link comprise links other than directly to the original node, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to adequately teach how to make/or use the invention, i.e., first link and second link comprise links other than directly to the original node.

5. Applicant's disclosure is insufficient to allow one of ordinary skill in the art to make or use the invention without undue experimentation because applicant did not adequately disclose the necessary apparatus to perform the claimed method. See In re Gunn, 190 USPQ 402, 406 (CCPA 1976.) In fact applicant's disclosure did not even include the description first link and second link comprise links other than directly to the original node, on which the claimed method could be implemented.

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6. Claim 1-33 are rejected under 35 U.S.C. § 112, first paragraph, for reason set forth in the objection to the specification.

7. It is suggested that applicant could overcome 112/first paragraph rejection by providing a suitably detailed system diagram (with appropriate cross-indexing in the detailed description to reference numerals on said system diagrams.) No new matter should be added.

For examination purpose, first link and second link comprise links other than directly to the original node, will be interpreted as third link.

8. The text of those sections of Title 35, U.S. Code § 102 (e) and 103 (a) not included in this action can be found in a prior Office Action.

9. Claims 1, 2, 4, 12, 13, 15, 23, 24 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruck et al. (US. 6,088,330).

10. As to claims 1, 2, 4, 12, 13, 15, 23, 24 and 26, Bruck discloses a reliable distributed computing system, which includes redundancy feature, which includes having a plurality of switch act as an intermediate node, coupled to a plurality of nodes that have at least two communication links for allowing the nodes to reroute communication, in case of link abnormality. Bruck's nodes are fault-tolerant node (claims 2 and 4). Furthermore, Brock discloses each of the nodes is capable of selecting communication path from link status, e.g., link abnormality (claim 1). Bruck further teaches a third link other than link to original node, (see link between switch 110-112).

11. Claims 3, 14 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruck et al. (US. 6,088,330).

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12. As to claims 3, 14 and 25, Bruck discloses the invention substantially, as claimed, as described in claim 1, but fails to include a non-fault tolerant node. However, the claimed non-fault-tolerant node, in light of the specification, is a single link node, and as admitted in the applicant background of invention that the non-fault tolerant node was included in the network; prior the invention was made (see background of invention).

It would have obvious to one of ordinary skill in the art at the time of the invention was made to include a non-fault-tolerant node with Bruck's reliable network to enhance reliability of a conventional single link node. The motivation of doing so would have been obvious that to allow the non-fault-tolerant node to take advantage from the reliable network and improving efficiency of the network as a whole.

13. Claims 5-11, 16-22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brock, as applied to claims 1, 11 and 23 above, in view of Okanou et al (US. 5,925,137).

14. Claims 5-11, 16-22 and 27-33, Brock discloses the invention substantially, as claimed, as described, in claims 1 above, but fails to teach links state table includes link status, diagnostic status, data represent routing to other node, status of ability of sending, receiving data.

However, in an analogous art, Okanou teaches a method and system for routing management, which comprises health check feature for diagnosis the network indicate the link status in the table, e.g., active node, link etc. the teaching related to link status, e.g., active status, implies the ability of sending and receiving data of the associated nodes (Abstract; Col. 1, lines 55-67; Col. 2, lines 35-54). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Okanou link state table with Brock to

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enable each of the node to alter communication path as needed, thereby, improving fault-tolerant efficiency.

15. Applicant's arguments filed on 05/29/2003 have been fully considered but they are not deemed to be persuasive. In the remarks, applicant argued in substance that:

Regard to claims, 1, 4-10, 12-21 and 23-32, applicant fails to particular point out the element(s), which is not taught by the reference, thus, no response is required.

As to claims 3, 14, and 25, language of the claims are analogous, "wherein the originating node is a fault tolerant node." In light of applicant specification, non-fault tolerant node referred to any network node with one link. Thus, any single connection devices in a network are non fault-tolerant nodes, while multiple connections devices are fault-tolerant nodes. The computer or device with single connection are conventional, most of computer device attached to a network have single connection, in response to applicant challenging well-known assertion of non-fault tolerant node, applicant is directed to applicant own background of invention which described the problem occurring in a computer with single connection, as evident.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bunjob Jaroenchonwanit whose telephone number is (703) 305-9673. The examiner can normally be reached on 8:00-17:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

/bj
6/21/2003

A handwritten signature in black ink, appearing to read 'B. Jaroenchonwanit', is written over a horizontal line.

B. JAROENCHONWANIT
PRIMARY EXAMINER